

Commonwealth of Kentucky
Division for Air Quality
PERMIT APPLICATION SUMMARY FORM

Completed by: Vahid Bakhtiar

GENERAL INFORMATION:

Name:	A-Carb LLC
Address:	One Carbon Way, Walton, Kentucky 41094
Date application received:	9/27/2006
SIC Code/SIC description:	3728, Aircraft Parts and Auxiliary Equipment
Source ID:	21-015-00125
Source A.I. #:	137
Activity ID:	APE20060003
Permit:	F-07-006

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
___ Administrative	<input type="checkbox"/> Title V
___ Minor	<input type="checkbox"/> Synthetic minor
___ Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☐ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	< 90	2830.67
SO ₂	3.304	3.304
NO _x	< 90	106.93
CO	51.38	51.51
VOC	< 90	92.87
LEAD	None	None
Single HAPs	< 9	>9
Source wide HAPs	< 22.5	975.17

SOURCE DESCRIPTION:

A-Carb manufactures aircraft brake pads using carbon vapor infiltration (CVI) for depositing graphite on a prepared carbon substrate. A substrate felting operating uses pre-oxidized acrylonitrile fiber to make brake pad pre-forms. The resulting brake pads are initially carbonized in a two-stage process in separate high temperature carbonizing furnaces. The initial stage (furnace) vents to a thermal oxidizer. The brake pads are then placed in high temperature CVI furnaces for the carbonization process, where a mixture of propane and natural gas is circulated for an extended period of time. The furnace exhaust is through a steam vacuum ejector/barometric condenser system with non-condensable hydrocarbon gases being burned in a steam boiler to produce steam for the process. A cooling tower re-circulates contact cooling water to the process and an emergency generator is available for orderly shutdown of the furnaces in case of power failure. The facility also operates an emergency diesel pump engine for the cooling towers and a natural gas fired standby boiler.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

1. Volatile organic compound (VOC) emissions shall not exceed 90 tons per year based on a 12 month rolling total for the entire source to preclude a major source Title V review.
2. Hazardous air pollutants (HAPs) emissions shall not exceed 9 tons per year individually and 22.5 tons per year combined based on a rolling 12 month total for the entire source to preclude a major source Title V review.
3. Particulate matter (PM) emissions shall not exceed 90 tons per year based on a 12 month rolling total for the entire source to preclude a major source Title V review.
4. NO_x emissions shall not exceed 90 tons per year based on a 12 month rolling total for the entire source to preclude a major source Title V review.

OPERATIONAL FLEXIBILITY:

None